

REMARKS

Claims 15-19, 25-28 and 30-40 are pending in the application. Claims 1-14, 20-24 and 29 have been canceled. Claims 15 and 25-27 have been amended, while the dependency of claim 30 has been changed. New claims 35-40 have been added herein by the above amendment.

Applicant would like to thank the examiner for the thorough consideration given to this application. In view of the cited and applied art, independent claim 15 has been amended to more specifically recite structural features of the fuel filter not disclosed or suggested by the cited prior art.

Initially it should be noted that paragraphs [0032] and [0033] have been amended for clarification purposes. In line 2 of paragraph [0032], "whereas" has been changed to and since both connections 4 and 8 extend in a plane that is parallel to the longitudinal axis (note Figs. 1 and 4). In line 3 of paragraph [0032], "housing" has been changed back to element. In the preliminary amendment, filed January 26, 2006, the word element was inadvertently changed to housing. It is the filter element that is being described in this sentence as being block-shaped, not the filter housing, since the filter housing has previously been described as being block-shaped in line 6 of paragraph [0029].

Reconsideration of the rejection of claims 15, 18, 20, 22-31 and 34 under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Best et al (U.S. 2,477,716) is respectfully requested.

Briefly stated, the invention is directed to a fuel filter 1 comprising an elongated flat filter housing 2 having a first longitudinally extending side wall 2a, a second longitudinally

extending side wall 2b, a first vertically extending end 2e, a second vertically extending end 2f, a fuel inlet 4 for delivering fuel to be filtered into the housing and a fuel outlet 8 for delivering filtered fuel from the housing. The fuel inlet and the fuel outlet are provided on the ends 2e, 2f of the filter housing. An elongated flat filter element 11 having a clean side 13 and a dirty side opposite the clean side is contained in the filter housing. At least one wall 12 disposed between the clean side of the filter element and the first side wall 2a of the filter housing encapsulates the clean side of the filter element. A gap 16 extends in the longitudinal direction of the filter housing 2 between the at least one encapsulating wall 12 and the first side wall 2a of the filter housing. The at least one encapsulating wall 12 has grooves 16l, 16q (paragraph [0036] and Figs. 2 and 3) in the side of the wall oriented toward the first side wall 2a forming part of the gap for uniformly distributing fuel from the fuel inlet over the filter element to the dirty side of the fuel element.

Claim 15 has been amended to emphasize additional features of the fuel filter that are neither disclosed nor suggested by Best et al. Claim 15, as amended, now requires the following:

an elongated flat filter housing **having a longitudinal axis, at least first and second longitudinally extending side walls, and opposing ends extending vertically to the longitudinal axis,**

at least one substantially elongated flat filter element contained in the housing, the at least one substantially flat filter element being embodied overall as planar or flat in shape having a clean side and a dirty side which are both substantially planar and are situated essentially parallel to each other, the clean side being disposed between a first elongated

surface of the flat filter element and the first side wall of the housing, and the dirty side being disposed between a second elongated surface of the flat filter element and the second side wall of the housing, which second elongated surface opposes the first elongated surface,

a fuel inlet **provided on an end of the housing** delivering fuel to be filtered into the housing and a fuel outlet **provided on an end of the housing** delivering filtered fuel from the housing,

at least one wall encapsulating the clean side of the filter element, the at least one encapsulating wall being disposed between the clean side of the filter element and the first side wall of the filter housing, wherein the filter element and the at least one encapsulating wall together constitute a filter insert which is inserted into the housing, and

a gap in the region of the fuel inlet extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing, wherein the at least one wall encapsulating the clean side of the filter element has grooves in the side of the wall oriented toward the first side wall of the filter housing forming part of the gap for uniformly distributing fuel from the fuel inlet over the filter element to the dirty side of the filter element.

To support a rejection of a claim under 35 U.S.C. 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984). To establish prima

facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

While Best et al may disclose an elongated box-shaped filter housing 5 having an inlet 14 and an outlet 22a extending outward from opposed side walls of the housing, filter material 31 having a clean side and a dirty side contained in the housing, and a casing 7, 8 having at least one wall encapsulating the filter material 31, Best et al lack a teaching of at least the following structural features: a *flat* filter housing, a fuel inlet *provided on an end of the housing* delivering fuel to be filtered into the housing and a fuel outlet *provided on an end of the housing* delivering filtered fuel from the housing, and *a gap in the region of the fuel inlet extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing, wherein the at least one wall encapsulating the clean side of the filter element has grooves in the side of the wall oriented toward the first side wall of the filter housing forming part of the gap for uniformly distributing fuel from the fuel inlet over the filter element to the dirty side of the filter element.*

Best et al does not disclose a flat filter housing as intended by the invention, wherein the width and length of the housing is greater than its thickness or depth, as described in the specification in paragraph [0031]. The filter housing in Best et al, while having a length greater than its thickness or depth, does not have a width that is greater than the thickness or depth of the housing. As clearly shown in Figs. 1-6, the width and thickness or depth of the housing are identical. Thus the filter housing in Best et al is not a flat housing as its use is intended by the invention.

In Best et al, as clearly shown in Figs 1 and 2, the inlet 14 and the outlet 22a are provided on opposing top and bottom walls of the outer filter casing 5, not on the vertically extending ends of the outer filter casing as claimed (see lines 2-4 and 13-15 of the claim). Best et al, in col. 2, ll. 23-29 of the specification, define the ends of the casing as that portion of the casing which end plates 23 and 24 are held against by clamps 27 and 28. Inlet 14 and outlet 22a are not provided on these plates. Moreover, in ll. 2 and 3 of claim 1, the inlet and the outlet are specifically recited as being in the bottom and top, respectively, of the outer casing. Thus, the claimed inlet and outlet arrangement is not taught by Best et al.

Further, as is evident from at least Figs. 2-4 and 6 of Best et al, and from the language in col.1, ll.51-52 of the specification, i.e., *casings 7 and 8 are frictionally held within the outer casing*, there is no teaching whatsoever of a gap in the region of the fuel inlet extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing. The at least one encapsulating wall (identified by the examiner as wall 7, 8) is clearly shown in Figs. 2-4 and 6 of Best et al as being in continuous abutting contact with the walls of the outer filter casing 5. The continuous abutting contact of the walls is a clear indication that there is no gap in the region of the fuel inlet extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing. Moreover, providing a gap extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing would diminish the operational function of the friction fit required to hold the inner casing 7, 8 within the outer filter housing.

Additionally, as is evident from at least Figs. 2-4 of Best et al, there is no teaching whatsoever of the at least one wall encapsulating the clean side of the filter element having grooves in the side of the wall oriented toward the first side wall of the filter housing forming part of the gap for uniformly distributing fuel from the fuel inlet over the filter element to the dirty side of the filter element. As illustrated in Figs. 2-4, the at least one encapsulating wall (identified by the examiner as wall 7, 8) is clearly shown as having an unbroken, uniform thickness throughout its length. The unbroken, uniform thickness of the at least one encapsulating wall is a clear indication that the encapsulating wall does not have grooves in the side of the wall oriented toward the first side wall of the filter housing. Moreover, Best et al specifically disclose in col. 2, lines 45-49 of the specification that the distribution of liquid from the inlet 14 over the filter material 13 occurs within a chamber 15,16 in casing 7, 8 after the liquid is diverted by the baffle plate 13 through an arched opening 17 in the chamber. The liquid in the chamber is forced upwardly through openings in the upper wall 22 of the chamber and passes through the filtering material 31. Thus, the distribution of liquid over the filter material is performed by the flow of liquid in the chamber through openings in the upper wall of the chamber and not by grooves in the side of the encapsulating wall oriented toward the first side wall of the filter housing as claimed.

Finally, since there is no teaching in Best et al of a gap in the region of the inlet extending in the longitudinal direction of the filter housing between the at least one wall encapsulating the clean side of the filter element and the first wall of the filter housing, or grooves in the side of the encapsulating wall oriented toward the first side wall of the filter housing, the claimed limitation that the grooves form part of the gap for uniformly

distributing fuel from the fuel inlet over the filter element to the dirty side of the filter element is **not** met.

Therefore, claim 15 is neither anticipated by Best et al under 35U.S.C. 102(b) nor unpatentable over Best et al under 35 U.S.C. 103(a) since all the claim limitations are **not** found or taught by the reference. Withdrawal of the rejection is respectfully requested.

Claims 18, 20, 22-31 and 34 are dependent upon claim 15. The elements recited in claim 15 are incorporated into these claims by virtue of their dependency upon claim 15. Therefore, the limitations recited in claims 18, 20, 22-31 and 34 are neither anticipated by Best et al under 35 U.S.C. 102(b) nor unpatentable over Best et al under 35 U.S.C. 103(a) for the same reasons claim 15 is not anticipated or unpatentable over Best et al. Withdrawal of the rejection is respectfully requested.

Claims 16, 17, 19, 21 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable Best et al (US 2,477,716) in view of Hopkins et al (US 5,620,599).

The examiner relies upon Hopkins et al to teach a folded filter material 302 essentially in the shape of a block.

Neither Best et al taken alone or combined with the teachings of Hopkins disclose or suggest the recited structural arrangement as recited in amended claim 15. The addition of Hopkins et al to the primary reference does not make up for the shortcomings of Best et al and therefore cannot render the invention obvious as required under 35 U.S.C 103. In other words, even if it had been obvious to combine the teachings of Hopkins et al, one of ordinary skill in the art would not have arrived at the subject matter defined by claims 16, 17, 19 and 32. Therefore, withdrawal of the rejection is respectfully requested.

Claim 33 is rejected under 35 USC 103(a) as being unpatentable over Best et al (US 2,477,716).

The examiner notes that Best et al lacks disclosure of a nondetachable connection between the housing part and the cover, but relies upon legal precedent established by prior case law to suggest that it would have been obvious to make the connection between the housing part and the cover nondetachable.

Claim 33 is indirectly dependent upon claim 15. The elements recited in claim 15 are incorporated into this claim by virtue of its dependency upon claim 15. Therefore, claim 33 is not unpatentable over Best et al under 35 U.S.C. 103(a) for the same reasons claim 15 is neither anticipated by nor unpatentable over Best et al. Thus, even if it would have been obvious to make the connection between the housing part and the cover nondetachable, the basic deficiencies in Best et al are not overcome. Accordingly, withdrawal of the rejection is respectfully requested.

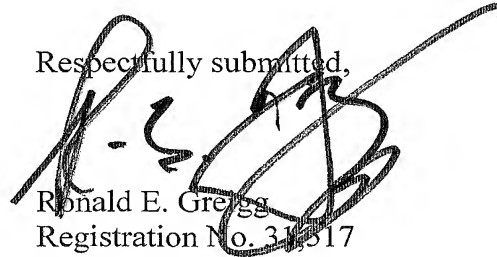
New claims 35-40 have been added. These claims are either directly or indirectly dependent upon claim 15. Applicant believes these claims to be allowable over the prior art of record as none of the prior art references, individually or combined, show or suggest the structural arrangements recited in these claims nor the structural arrangements recited in claim 15, from which the claims depend. Consideration of new claims 35-40 is respectfully requested.

Appl. No. 10/565,381
Amdt. dated March 12, 2010
Reply to Office action of October 13, 2009

The Commissioner is hereby authorized to charge any necessary fees in connection with this communication to Deposit Account Number 07-2100.

Entry of the amendment and allowance of the application are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. E. Greigg', is written over the typed name and registration information.

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